

Patent
10/099,891

In the Specification

Please amend paragraph [0042] as shown.

[0042] It is anticipated that the inventive method proposed for analog control over attenuation by beam misalignment is the most cost effective approach to achieve such attenuation, however it should also be recognized that this places additional demands on the mirror pointing accuracy and jitter. Specifically, the attenuation induced is proportional to the overlap integral of the misaligned beam with the output collimator. The misalignment sensitivity of this overlap, and hence the attenuation, is effectively zero at optimum coupling, and increases dramatically as the beams are misaligned. Therefore there may be an unacceptable amount of jitter (amplitude noise) on a given output channel if the mirror pointing is not sufficiently stable at the maximum required attenuation. If the mirror has unacceptable jitter from poor pointing stability, the jitter can be reduced by operating the mirror at the optimum coupling position which is insensitive to jitter, and attenuating the beam with an aperture or shutter (shown in FIG. 3, element 380) that provides analog control over the fraction of the beam that is blocked. While this increases the cost and complexity because of need for the apertures, it does have the benefit of relaxing the stringent requirements placed on the mirrors. Of course it is also possible to use a combination of aperture control and beam misalignment should either of these approaches prove insufficient on their own.